Garnering Administrative Support for School-Based Asthma Education Programs

Nancy A. Langenfeld, Maria M. Bonaiuto, Ellen O. Edmonds

CASE STUDY OBJECTIVES

- To identify information needed to gain the attention and support of principals for implementing asthma education programs in schools
- To demonstrate the use of student health data to document the need for asthma education
- To identify the benefits of developing a comprehensive plan to address asthma
- To demonstrate the value of the coordinated school health team approach in responding to the needs of students with asthma and other health-related issues in schools

SCHOOL DEMOGRAPHICS

Charlotte-Mecklenburg Schools (CMS), North Carolina (NC), is an urban school district with 125,000 students in 152 schools, pre-K to 12. School nurses each cover 2 or more schools with a school nurse to student ratio of 1:1900. Asthma accounts for over 60% of all chronic health conditions reported by school nurses in the 2004-2005 school year. With over 6700 students diagnosed, asthma is the number one chronic health condition in the school district.

PROGRAM CONTEXT

Before 2002, minimal partnership and collaboration existed between CMS and the Mecklenburg County Health Department (MCHD), School Health. Most dialogue occurred at the central administration level and focused primarily on problem-oriented issues, such as medication administration, immunization compliance, and parent inquiries. In 1999, a survey of seventh- and eighthgrade students conducted by the NC Department of Health and Human Services indicated that 10% of CMS students reported a diagnosis of asthma and an additional 18% reported symptoms of asthma including wheezing or coughing during activity and at night. At the same time, the NC Division of Public Health through the Asthma Alliance of NC highlighted the negative effects of poor air quality on children with asthma and encouraged the formation of local asthma coalitions to address the issue. The health department's school health division spearheaded the forma-

Nancy A. Langenfeld, RN, MS, AE-C, Asthma Management Nurse (nancy. langenfeld@cms.k12.nc.us), and Maria Bonaiuto, RN, MSN, NCSN, School Health Director (maria.bonaito@carolinashealthcare.org), Mecklenburg County Health Department, School Health Services, 249 Billingsley Road, Charlotte, NC 28211: and Ellen O. Edmonds, MS, MPH, CAVIC, Director (ellen.edmonds@cms.k12.nc.us), School Health and Early Childhood Education, Charlotte-Mecklenburg Schools, Family Application Center, 700 Marsh Road. Charlotte, NC 28209. This study was funded by Centers for Disease Control and Prevention Cooperative Agreement #U87/CCU422642-02. The Asthma Education Program appreciates the dedicated support of Dr James L. Pughsley, Dr E. Winters Mabry, Dr Frances Haithcock, Polly Baker, and Anthony F. Bucci.

tion of the Mecklenburg County Asthma Coalition to improve knowledge and treatment of asthma. School nurses, who were already spread among 3 schools, did not have sufficient knowledge, training, or resources to address the increasing number of students being identified with asthma-related issues. CMS and the MCHD received a grant through the Centers for Disease Control and Prevention (CDC), and the Asthma Education Program (AEP) was born.

CASE STUDY

Charlotte-Mecklenburg Schools, in partnership with MCHD, through a cooperative agreement with the CDC, initiated the AEP in 2002. Unlike previous efforts to address student health needs, this initiative was founded on 2 primary tenets: collaborative partnerships and coordinated school health. AEP staff consisted of a Healthy Schools coordinator from CMS and an asthma management nurse from the MCHD. A collaborative selection process identified 15 schools for the first phase based on student demographic data from CMS and chronic illness statistics provided by the school nurses.

The AEP's overarching goal was to create for students with asthma a safe, healthy learning environment that would keep children in school, ready to learn and fully able to participate in the school program.² Its primary strategies were the utilization of existing resources within the schools and the development of coordinated school health teams as a forum for identifying and addressing the needs of students with asthma during the school day. With the current emphasis on academic accountability, student achievement, and assessment, the greatest challenge was convincing building principals of the value of adding the AEP program and a school health team to their schools.

Administrative Buy-In

The first and most important step was gaining building principals' support. This required tailoring the message to make a clear connection between asthma programs, school improvement, and student achievement specific to each principal's school. The AEP's staff, student, and parent education programs also addressed 4 key school district accountability measures for which principals have responsibility: student attendance, staff development, parent involvement, and a safe school environment.

AEP staff met with principals and presented for discussion their individual building's asthma profiles based on data provided by the school nurses. Data included each school's number and percentage of students with asthma, number of days of absenteeism for students with asthma, number of students with asthma medication in school, and number of students with and without asthma action plans. When available, data also included the number of health office visits, 911 calls, or calls to parents for

students with asthma. Prevalence and absenteeism data clearly made the most significant impact. Although absences were not linked specifically to asthma, the total number of absences for students with asthma was significant. For example, in 1 school 33 students, or 8% of the total enrollment of 412, had a diagnosis of asthma, with a cumulative total of 287 absences for the previous school year. Further analysis showed that 6 of those students accounted for 121, or 43%, absences, an average of 21 days per student. Clearly, the potential effects of health and absenteeism on academic performance warranted intervention.

Other important issues raised with the principals were safety and availability of medication. For the school in this example, only 8 students had emergency asthma action plans on file and quick-relief medication in school. In a system where teachers and lay staff were the most frequent contacts or first responders to students with asthma, teacher and staff education about asthma was essential. The need to increase parents' understanding of their collaborative role in providing information and supplies to better manage their child's asthma in school also became evident.

The data-driven discussion incorporated an opportunity for principals to make a connection between their schools' experiences with asthma-related incidents and the incidents' impact on staff, students, and parents. The data also provided a framework for discussing how the resources and training offered by the AEP could serve the school community. Limited time during the school day to deliver programs was a frequent concern of principals. To secure administrative buy-in, the AEP made every effort to be flexible within the school schedule, connect to existing events, and deliver programs with minimal disruption to academic programs. The program provided staff development during regular staff meetings and on teacher workdays. Student programs occurred during wellness fairs, lunch bunches, academic and physical education classes, support groups, and after-school programs. Parent programs were available during the school day or in the evening, at parent-teacher association (PTA) meetings, open houses, and conference days. The AEP's willingness to adjust to the specific needs and culture of the school resulted in the perception of the AEP as a welcome resource for an identified need instead of as an intrusion.

School Health Team Formation

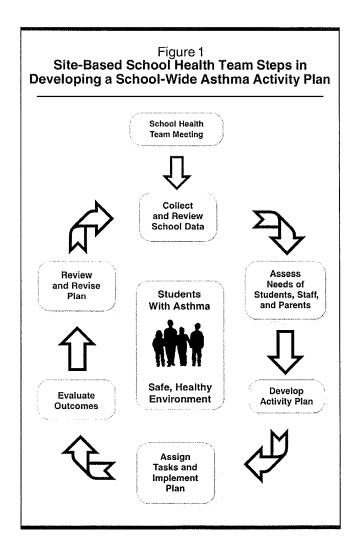
When the administrator was on board, AEP staff presented the benefits of forming a site-based coordinated school health team. Recommended membership corresponded to the 8 components of a coordinated school health program: nurse, physical education teacher, counselor or social worker, child nutritionist, classroom or health teacher, parent of a child with asthma, and school administrator, with the addition of community members as needed to address specific needs or gaps in the team.³ The principal initially identified the school employees. The composition and size of each team was unique to the culture and resources of each individual school. The principal's participation as a team member was a key element, demonstrating administrative commitment and facilitating scheduling of meetings and activities. To promote collaboration and reduce duplication, some schools chose to link

to existing teams, such as student services teams, or to operate as a subset of the school leadership team. This model provided for common team membership with a built-in reporting mechanism for sharing pertinent information with the larger groups.

Plan Development

The planning process was a cyclical, dynamic process including the following steps: assessment, planning, implementation, and evaluation, with plan review and revision on an ongoing basis (Figure 1). AEP staff facilitated the school health team's needs assessment and planning session. These sessions included data review, analysis of what was already in place, consideration of necessary changes, and development of an asthma activity plan. The review of data on students with asthma from the school asthma profile was a common and neutral focal point for initiating discussion. Teams recognized the link between health, absences, and school performance and concluded that students with well-managed asthma would have the opportunity to learn better. Asthma became not just the nurse's concern but also everyone's concern.

To set a positive tone, team members shared what resources were already in place to address asthma health needs. Participants' active engagement in identifying the



school's existing strengths and resources generated much positive energy. Members highlighted their own specific activities and contributions, many of which other team members had not known about before. Assets cited included a knowledgeable part-time school nurse, trained first responders, strong school leadership, dedicated support staff, and good communication. When asked what might be added or changed, team members revisited their data. The first suggestion was almost always providing staff development on asthma for all school personnel. Other ideas included improving health care by employing a full-time school nurse in each school, developing better communication and tracking tools, reviewing and following up on student absences with teachers and parents, enhancing staff awareness of asthma triggers, training more staff to be first responders, and adding specific education programs for students with asthma and their parents.

Development of an asthma activity plan began at the conclusion of the initial steps of the assessment process. Team members suggested potential tasks or actions to address identified areas of need and prioritized those actions on the basis of importance, feasibility, and availability of resources. The asthma plan focused on the needs of 3 target populations: staff, students, and parents (Figure 2). Plans for the first year were simple with attainable goals, including at least 1 activity for each target population with a schedule for specific dates and times. One team member volunteered to accept primary responsibility for coordinating each activity, and the team developed a list of resources or contacts. The group selected a team leader as the point person for communication and coordination between team members and AEP staff.

The principal's willingness to commit time and coverage for team members to participate fully in discussions without feeling rushed or pressured was a critical factor for team success. A relaxed but structured atmosphere fostered honest discussion and sharing of ideas. After working through the process, the team decided that 3 meetings/year worked best with assessment and plan development occurring at the beginning of each school year, followed by a midyear progress review and an end-of-the-year evaluation, which then started the cycle over (Figure 1). Each member received a completed copy of the data profile and the plan that included a schedule of meeting dates for the entire school year.

Program Evaluation

AEP staff developed a pre-post team survey in consultation with the project evaluator from the local hospital research division. Survey responses after one planning session indicated that 80% of the participants had a sense of "ownership over the school health team," 83% felt they were able to "make decisions to move the planning process forward," and 83% would "recommend this process to other schools as a way to affect students with health needs." Administration of postsurveys will occur at the end of each planning year.

Quantitative Outcomes

Twelve of the 15 schools developed site-based school health teams and implemented asthma activities. Ten of these school health teams had representation at a district

conference on asthma and coordinated school health. The focus on asthma in the participating schools resulted in a 30% increase in asthma emergency action plans from October 2003 to June 2004. Chronic illness lists compiled by school nurses indicated an increase in the number of students reported to have asthma from 4008 in October 2003 to 6700 in October 2005. Case management data indicated an increase in the number of students with peakflow meters, fewer health office visits, and improved attendance. Anecdotal data from school nurses indicated a greater awareness of asthma among themselves, school staff, and parents.

As a direct result of team activity plans, AEP staff provided asthma workshops to 2077 staff members (administrators, classroom teachers, physical education teachers, coaches, school nurses, and support staff). Postsurvey data indicated that 85% of teachers reported they had a student with asthma in their class, and 91% felt more confident about working with students with asthma.

Qualitative Outcomes

Observing the growth in commitment, planning, and implementation from year 1 to year 2 of the project was rewarding. As teams became more self-directed, the AEP staff's role diminished to one of support or resource provision. Teams demonstrated increased ownership and collaboration, created their own agendas, initiated planning, and shared responsibility for implementing their plans. Teams also increased the scope of their plans to provide asthma education to all students (not only those with asthma) and added prevention education on related topics, including other chronic heath conditions. Activity plans also involved more parents and community partners as team members and resources. Three of the selected school teams used the School Health Index to increase their plan's scope to address school-wide issues such as increasing physical activity, nutrition, health education, environmental controls, and staff wellness.

One creative elementary school established a Healthy Schools Rock theme for the school, devoting every other staff meeting to a presentation by the school nurse on a health-related issue. Topics included asthma, respiratory care services, emergency response, and the creation of an asthma-friendly school environment. The school nurse offered Open Airways to students with asthma and displayed asthma brochures and handouts in the front foyer. The physical education teacher coordinated a family health and activity night with sessions on asthma, dental health, nutrition, and physical activity. Implementation of a staff wellness weight-loss-challenge program included a presentation on healthy nutrition by the community team member, a registered dietician from the MCHD, at a staff meeting. The principal increased team commitment by participating in the CDC School Health Index asthma pilot, resulting in a comprehensive school-wide plan for presentation to the school improvement planning team.

LESSONS LEARNED

 Administrative support is critical to gain entry into schools. The use of building-specific asthma data

Figure 2
School Health Team Asthma Plan Activities

profiles that connected health and learning made obtaining administrator buy-in easier. Building administrators were more receptive when the focus was on the needs and accountability goals of their individual schools.

Linking programs to the existing school schedule creates time for planning and program delivery. Flexibility and working within the activities schools had already planned were important. Offering to speak

at grade-level team meetings; speaking in health, physical education, or science classes; and putting information on the district Web site and in newsletters was beneficial for teachers and staff. Classes in before- or after-school programs, involving students with asthma in presenting programs in their classrooms, creating a support group, linking with existing school clubs (health occupations or anti-tobacco), or making morning announcements with asthma-related

- messages worked well for students. Parent conference days, newsletters, PTA meetings, wellness fairs, open houses, and day and evening programs with local physicians and nurses provided opportunities for parents. Disseminating information in these varied ways involved little cost and caused minimal disruption to academic schedules and teacher-contact time.
- Site-based school health teams are powerful vehicles for building internal capacity and supporting positive change. Student data provided a neutral focus for initiating discussion. Teams needed scheduled time for initial and ongoing assessment, planning, and evaluation. Early activity plans needed to be simple and doable, to target specific activities to avoid overwhelming team members, and to build in a sense of accomplishment. Generalizing the team planning process to address other coordinated health issues was
- easy. Using the School Health Index enhanced the planning process.
- Strong collaborations added skills, knowledge, and power to schools, families, and communities and a voice for children with asthma. Everyone working together clearly contributed to a healthier school climate, especially for students and staff with asthma. ■

References

- 1. Yeatts K, Shy C, Sotir M, Music S, Herget C. Health consequences for children with undiagnosed asthma-like symptoms. *Arch Pediar Adolesc Med* 2003;157:540-544.
- 2. Kolbe LJ. Education reform and the goals of modern school health programs. *State Educ Stand*. 2002;3(4):4-11.
- 3. Centers for Disease Control and Prevention. Strategies for Addressing Asthma Within a Coordinated School Health Program. Atlanta, Ga: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion; 2002.

Garnering Administrative Support for School-Based Asthma Education Programs

August 2006 issue of Journal of School Health

Earn .5 CECH Category I CHES, OH0005 Earn .6 Continuing Nursing Education Contact Hours

- 1. The primary strategies used in this study were:
 - a) Utilizing existing resources and developing school health teams.
 - b) Creating partnerships between public health and school nurses and between primary care providers and school nurses.
 - c) Working with an existing school health council and building board support.
 - d) Activating parents as advocates and instructing them in ways to speak before the school board.
- 2. Gaining the support of principals required tailoring messages to link asthma control with student improvement in:
 - a) Classroom behavior.
 - b) Self-esteem.
 - c) Achievement.
 - d) High-stakes test scores.
- 3. A school's asthma data profile included all of the following EXCEPT:
 - a) Number of students with asthma.
 - b) Number of students with asthma who used their inhalers at school.
 - c) Number of absences for students with asthma.
 - d) Number of students with asthma action plans.
- **4.** A key factor in team success was:
 - a) Location of the meetings.
 - b) Providing food.
 - c) Keeping meetings short and focused.
 - d) Coverage for staff to attend meetings.
- 5. One creative elementary school established a Healthy Schools Rock theme that resulted in:
 - a) Statistically significant increases school staffs' knowledge about asthma.
 - b) The school nurse becoming part of the school administration team.
 - c) A comprehensive, schoolwide asthma management plan being presented to the school improvement planning team.
 - d) Adoption of new asthma-friendly policies by the school board.

Journal of School Health is written and produced by the American School Health Association. Activity planning, test questions and pilot testing were conducted by Susan F. Wooley, PhD, CHES, and the ASHA Continuing Nursing Education Committee (the ASHA ANCC provider unit).

Answer Sheet (Event 01005)														
4	۸ ¬	D C	C [D ==										
	A 🗆	B□	C□	D =										
	A 🗆	B□	СП	D =										
	A 🗆	B 🗆	C \square	D =										
	A □	B□	C□	D =										
5 .	Α□	В□	С□	D□										
	.5 CEC	H Categ	ory I CH	IES, OH0005		.6 Cont	inuing Nur	sing	g Ed	uca	tion	Cor	ntact Hours	
 Instructions Select the answer and check the corresponding box on the Answer Sheet. Retain the test questions as your record. Complete the Registration, Evaluation, and Payment Information in the space provided. Return the Answer Sheet to: Continuing Education Coordinator, American School Health Association, 7263 State Route 43, PO Box 708, Kent, OH 44240; 330/678-4526 (fax). 80% constitutes a passing score. Please allow 4-6 weeks for processing. For recertification purposes, the date that contact hours are awarded will reflect the date of processing. Objectives Learners should be able to: 1) Describe the research or case study; 2) Identify lessons learned from that study; 3) Determine whether the lessons learned apply to their practice; 4) Utilize relevant lessons learned to improve their practice. (Event 01005) Evaluation (please circle rating) 1) The stated objectives were met. Disagree 1 2 3 4 5 Agree 3) The content was related to the objectives. Disagree 1 2 3 4 5 Agree 3) The content was clearly written. Disagree 1 2 3 4 5 Agree 4) The test questions were clearly written. Disagree 1 2 3 4 5 Agree 3 4 5 Agree 4) The test questions were clearly written.														
1) The stated objectives were met. 2) The content was related to the objectives. 3) The content was clearly written. 4) The test questions were clearly written. 5) The content was related to my practice needs. 6) The module was easy to access and use. 7) Time it took to review the module and take the test: minutes.										3 3 3	4 4 4 4	5 5 5 5	Agree Agree Agree Agree	
Send comments to: Mary Bamer Ramsier, PO Box 708, Kent, OH 44240; mbramsier@ashaweb.org														
Registration Name (Last, First, Middle Initial):														
	Degree(s): License or Certification Number:													
													·	
					Fax Number:									
Email Address:														

ray	Payment Co.													
		ASHA Member - \$3.00												
		Card Holder Name:											<u></u>	
	Cai	Card Number: Expiration Date:												

Signature: